REMARKS

The following list shows the status of each claim after this amendment:

Claim 1 - Amended
Claim 2 - Amended
Claim 3 - Original
Claim 4 - Original
Claim 5 - Original
Claim 6 - Amended
Claim 7 - Canceled
Claim 8 - Amended
Claim 9 - Canceled
Claim 10 - Canceled
Claim 11 - Canceled
Claim 12 - Canceled
Claim 13 - Amended
Claim 14 - Original
Claim 15 - Amended
Claim 16 - Original
Claim 17 - Amended
Claim 18 - Canceled
Claim 19 - Canceled
Claim 20 - Canceled
Claim 21 - Canceled
Claim 22 - Canceled
Claim 23 - Canceled
Claim 24 - Canceled
Claim 25 - Canceled
Claim 26 - Canceled
Claim 27 - Canceled
Claim 28 - Canceled
Claim 29 - Canceled
Claim 30 – Canceled.

Respectfully submitted,

SEAGATE TECHNOLOGY LLC
(Assignee of Entire Interest)

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Date

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MARKED-UP VERSION OF THE CLAIMS

1. (Amended) A method for controlling the power of a motor, comprising the steps of:

(a) applying power to a spindle motor to engage a start-up sequence;

(b) monitoring the amount of at least one of a current and a voltage applied to the spindle motor [during the start-up sequence];

(c) obtaining a control voltage proportional to one of the [motor] applied current and the applied voltage; and

(d) [disabling the start-up sequence] removing the power if the control voltage exceeds a predetermined voltage threshold.

2. (Amended) The method of claim 1 wherein the [predetermined voltage threshold is obtained from a digital-to-analog converter] power is applied for at least one of a start-up sequence and a run sequence.

3. The method of claim 2 wherein the predetermined voltage threshold corresponds to a preprogrammed start-up disc profile.

4. The method of claim 1 wherein step (c) further comprises obtaining the control voltage by integrating a voltage across a current sensing resistor.

5. The method of claim 1 wherein step (a) further comprises the steps of:

(a)(i) enabling the calibrating of the predetermined voltage threshold.

6. (Amended) The method of claim 5, wherein step (a)(i) further comprises the steps of:

(a)(ii) applying a signal from a digital-to-analog converter (DAC) to the input of a comparator;

(a)(iii) applying a finite specific reference signal to simulate the monitoring of one of the current and voltage applied to the spindle motor; and

(a)(iv) adjusting the signal from the DAC to compensate for offsets of the circuitry.

7. (Amended) The method of claim 1 further comprising the step of:

(e) waiting a fixed period of time;

(f) [re-enabling] reapplying power to the motor; and

(g) repeating steps (b) - (g).

8. (Amended) A method for controlling the current drawn from a power supply in a computer system by a spindle motor, comprising the step[s] of[:] decoupling the power supply from the spindle motor if a control voltage exceeds a predetermined voltage threshold.

[(a) applying power to a drive spindle motor to engage a start-up sequence; and

(b) monitoring the amount of current applied to the spindle motor during the start-up sequence.

(c) obtaining a control voltage proportional to the motor voltage;

(d) disabling the start-up sequence if the control voltage exceeds a predetermined voltage threshold.]

9. (Canceled) The method of claim 8 wherein the predetermined voltage threshold is obtained from a digital-to-analog converter.

10. (Canceled) The method of claim 9 wherein the predetermined voltage threshold corresponds to a preprogrammed start-up disc profile.

11. (Canceled) The method of claim 8 wherein step (c) further comprises obtaining the control voltage by integrating a voltage across a current sensing resistor.

12. (Canceled) The method of claim 8 further comprising the step of:

(e) waiting a fixed period of time;

(f) re-enabling power to the motor; and

(g) repeating steps (b) - (g).

13. (Amended) A data storage device, comprising:

at least one spindle motor;

a power supply electrically [connected] coupled to the spindle motor; and

a spindle motor controller, wherein the spindle motor controller measures and, if a threshold value is at least met, [limits an amount of] decouples power [from the power supply that is utilized by] to the spindle motor [during a spindle motor start-up sequence].

14. The data storage device of claim 13 wherein the spindle motor controller further comprises:

a driver control function programmed into the motor controller which disables a spindle motor driver for a fixed period of time.

15. (Amended) The data storage device of claim 13 wherein the spindle motor controller decouples power when a control voltage, proportional to at least one of a motor current and motor voltage, is at least equal to a threshold voltage [further consisting of:

a data storage device controller, operably connected to the spindle motor controller, wherein the data storage device controller can initiate or deactivate the spindle motor start-up sequence].

16. The data storage device of claim 14 wherein the driver control function is enabled when a signal proportional to a current applied to the spindle motor exceeds a predetermined threshold.

17. (Amended) The data storage device of claim 16 wherein the [predetermined threshold is a programmable voltage from a digital-to-analog converter] the power supply is coupled to the spindle motor for at least one of a start-up sequence and a run sequence.

18. (Canceled) A data storage device, comprising:

at least one spindle motor;

a power supply electrically connected to the spindle motor; and

means for monitoring power applied to the spindle motor during a start-up sequence.

19. (Canceled) The data storage device of claim 18, wherein the means for monitoring power further comprises:

a driver control function for disabling the motor drivers for a fixed period of time.

20. (Canceled) The data storage device of claim 19, wherein the driver control function further comprises:

a disable feature which initiates when a signal proportional to the spindle motor voltage exceeds a predetermined threshold.

21. (Canceled) A method for controlling the power of a motor, comprising the steps of:

(a) applying power to a motor to engage a run sequence; and

(b) monitoring the amount of current applied to the motor during the run sequence;

(c) obtaining a control voltage proportional to the motor current;

(d) disabling the run sequence if the control voltage exceeds a predetermined voltage threshold.

22. (Canceled) The method of claim 21 wherein the predetermined voltage threshold is obtained from a digital-to-analog converter.

23. (Canceled) The method of claim 22 wherein the predetermined voltage threshold corresponds to a preprogrammed run disc profile.

24. (Canceled) The method of claim 21 wherein step (c) further comprises obtaining the control voltage by integrating a voltage across a current sensing resistor.

25. (Canceled) The method of claim 21 further comprising the step of:

(e) waiting a fixed period of time;

(f) re-enabling power to the motor; and

(g) repeating steps (b) - (g).

26. (Canceled) A data storage device , comprising:

at least one spindle motor;

a power supply electrically connected to the spindle motor; and

a spindle motor controller, wherein the spindle motor controller measures and limits an amount of power from the power supply that is utilized by the spindle motor during a spindle motor run sequence.

27. (Canceled) The data storage device of claim 26 wherein the spindle motor controller further comprises:

a driver control function programmed into the motor controller which disables a spindle motor driver for a fixed period of time.

28. (Canceled) The data storage device of claim 26 further consisting of:

a data storage device controller, operably connected to the spindle motor controller, wherein the data storage device controller can initiate or deactivate the spindle motor run sequence.

29. (Canceled) The data storage device of claim 27 wherein the driver control function is enabled when a signal proportional to a current applied to the spindle motor exceeds a predetermined threshold.

30. (Canceled) The data storage device of claim 29 wherein the predetermined threshold is a programmable voltage from a digital-to-analog converter.